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Cover: "Prairie Falcon" by Tom Taylor

Formerly of Moose Jaw, our cover artist, Tom Taylor, has been working on the habitat program at the Provincial Museum, Edmonton, for several years.

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THE IDENTIFICATION OF THE PLANTS CALLED THE "PRAIRIE PARSLEYS"

by Beryl Hallworth
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These plants are all members of the Umbelliferae family, and their flowers are arranged in the form of an umbel, or umbrella. Four of them are difficult to distinguish in the field, because:

1. all have a similar habit (see habit sketches)
2. the leaves look alike and have long petioles
3. they all have a thick taproot
4. their flowers are in rather small, tight umbels and are usually yellow (though some are white).

So, it is easy enough to say, "That plant is a Prairie Parsley", but the real question is, "Which one?" The following keys may help to solve some problems. The key relies on:

1. differences between the leaves, i.e. whether they are pubescent (hairy) or glabrous (smooth)
2. differences in the color of the flowers.

When the flowers are dead, and the fruits are well developed, the Fruiting Key may be used. This, again, relies on differences between the leaves (which are here described in more detail), and between the fruits, i.e. whether they are "winged" or not.

The habit sketches are taken from "Vascular Plants of the Pacific Northwest" by Hitchcock et al.

Distribution in Alberta of Cymopterus acaulis, Lomatium foeniculaceum, Lomatium macrocarpum, and Musineon divaricatum

Cymopterus acaulis is found on dry soil in prairie grassland and on open dry benchlands. The specimens in University of Calgary Herbarium are from Drumheller, Medicine Hat and Redcliff.

Lomatium foeniculaceum is found on dry S. facing slopes, in coulees, in open benchlands, and on Stipa - Bouteloua prairie. The specimens in University of Calgary Herbarium are from Drumheller (Horseshoe Canyon and Rosebud), Dinosaur Provincial Park, Writing-on-Stone Provincial Park, Irvine, Hilda, Munson and Redcliff.

Lomatium macrocarpum has a wider variety of habitats. It is found on dry S. facing slopes and on sandy, dry ridges, but also in meadow, a vacant field and on the edge of disturbed land. The specimens in University of Calgary Herbarium are from Drumheller (Benyon and Demphy), Pincher Creek, Tunnel Mountain, Banff; Writing-on-Stone Provincial Park, Porcupine Hills, Okotoks, S.E. Calgary, Castlemount, Cypress Hills Provincial Park, Longview, Hilda, Nose Hill, Calgary and Beddington Creek near Calgary.

Musineon divaricatum var. hookeri also has a wider variety of habitats. It is found on dry, S. facing slopes, rocky-gravelly steep banks and on Stipa - Bouteloua prairie, but it has also been found in a vacant field, on a roadside, on a footpath in exposed prairie, and above a creek bank in foothills forest. The specimens in University of Calgary Herbarium are from Big Hills Provincial Park, Gleichen, Ghost Lake Reservoir, Cochrane, and Lac des Arcs, Banff, Drumheller, several Calgary locations, Writing-on-Stone Provincial Park, Porcupine Hills, Carseland Dam, Crowsnest Forest, Beddington Creek, Fish Creek, Glenmore and Nose Hill.

Flowering Key to Lomatium foeniculaceum, L. macrocarpum, Cymopterus acaulis and Musineon divaricatum

Leaves pubescent.

Flowers yellow; secondary umbels ball-like, bracts not extending beyond them; bracts short, hairy and pointed, not connate; involucel dimediate (bracts more numerous on one side than the other) ..... Lomatium foeniculaceum

Flowers white, purplish, or occasionally yellow; bracts long, slender and free, extending beyond secondary umbel; involucel not dimediate ..... Lomatium macrocarpum

Leaves glabrous.

Flowers yellow, leaf stalks ridged, winged and often covered with papillae; bractlets linear, connate at base and then spreading widely ..... Musineon divaricatum

Flowers white; bracts extending beyond secondary umbel, distinctly connate, with sharp-pointed tips ..... Cymopterus acaulis

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Fruiting Key to Lomatium foeniculaceum, Lomatium macrocarpum, Cymopterus acaulis and Musineon divaricatum.

Leaves sparsely to densely puberulent

Leaves dissected into numerous tiny segments mostly 1-3 mms. long; the fruits have wide lateral wings, and are 5-10 mms. long ..... Lomatium foeniculaceum

Leaves dissected into numerous segments 9 mms. long and 2 mms. wide; the fruits have wide lateral wings and are 10-20 mms. long ..... Lomatium macrocarpum

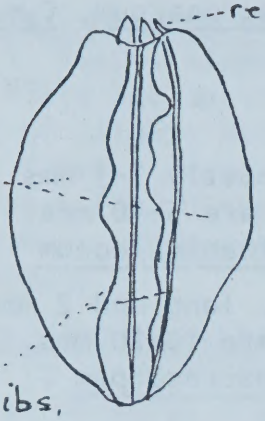
Leaves glabrous

Leaves divided once or twice into smaller segments; the blade is 1.5 - 1.7 cms. long and 1.5 cms. wide, and the petioles are not winged; the fruit is very similar to that of Lomatium, but can be distinguished by the wings on the dorsal ribs; Fruits are 5-10 mms. long ..... Cymopterus acaulis

Leaves divided once or twice, leaflets oblong, pinnately lobed, rather bluish or glaurous; fruit more or less ovate, with no lateral wings and no dorsal wings, 3-6 mms. long ..... Musineon divaricatum

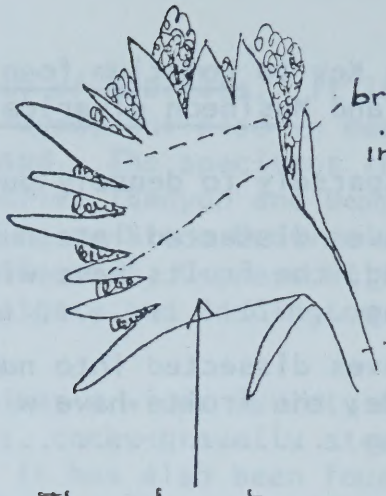
Cymopterus acaulis

FRUIT



These are WINGED

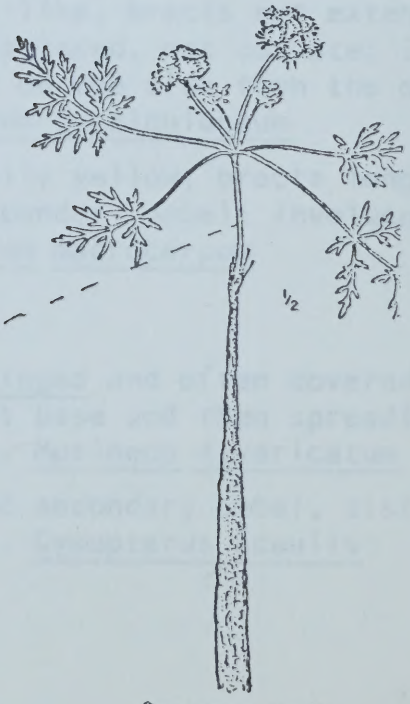
Secondary umbel



The bracts are connate producing a flabelliform structure – this helps to distinguish this genus from Lomatium.

Flowers are white.

Habit sketch of entire plant



Cymopterus acaulis

Note the STEM.

The species name acaulis means "no stem." It is often covered by the sheathing base of the

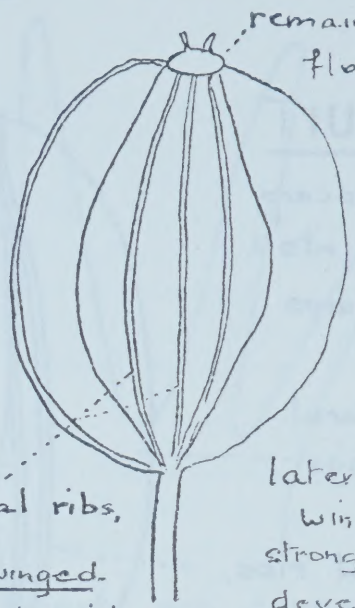
Fruiting umbel of schizocarps

Lomatium foeniculaceum

Bracts of involucel

The involucel is dimediate - ie. there are more bracts on one side than the other. The bracts are hairy + so is the pedicel.

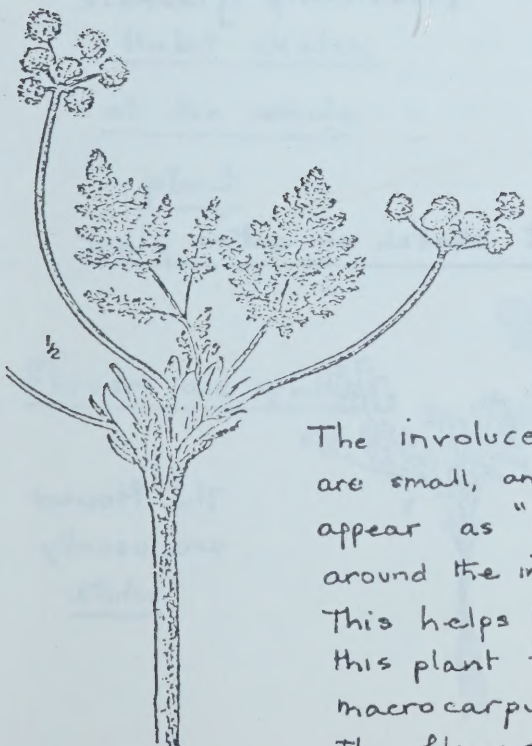
FRUIT



NOT winged.

This distinguishes this fruit from that of Cymopterus acaulis. Immature fruits often covered with bristles.

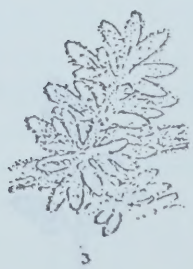
Habit sketch of entire plant



L. foeniculaceum

The involucel bracts are small, and do not appear as "rays" around the inflorescence. This helps to distinguish this plant from Lomatium macrocarpum. The flowers are yellow.

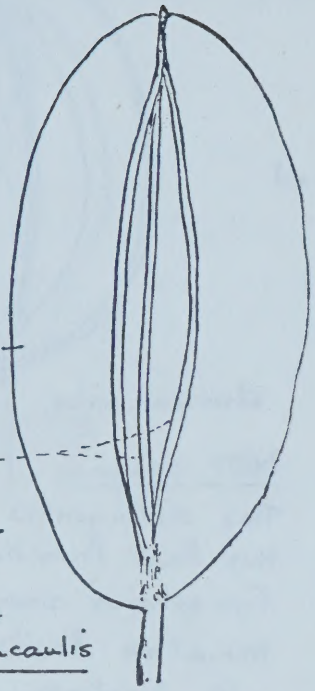
Leaflets, showing hairiness and crowded development



Lomatium macrocarpum

FRUIT

Schizocarp, splits into 2 mericarps

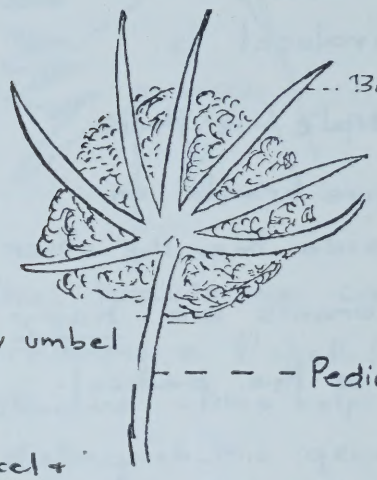


with NO wings - distinguishes this fruit from that of Cymopterus acaulis

Macro - carpum means large fruit

"Lomato" (Greek) means bordered and refers to the lateral wings.

Base of secondary umbel showing involucel of bracts



Pedicel + Bracts - the degree of hairiness varies greatly, from densely strigose to practically glabrate

Habit sketch of entire plant

L. macrocarpum

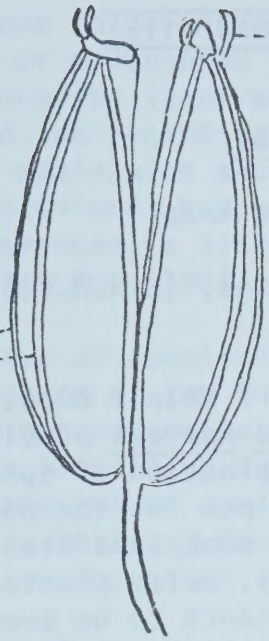
The flowers are usually white

One leaf, showing tri-pinnate development

Musineon divaricatum

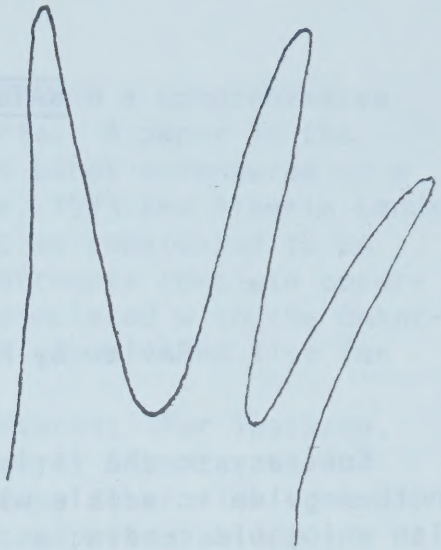
FRUIT

Schizocarp
- splits into 2 mericarps.



NO lateral wings
or
dorsal wings
present

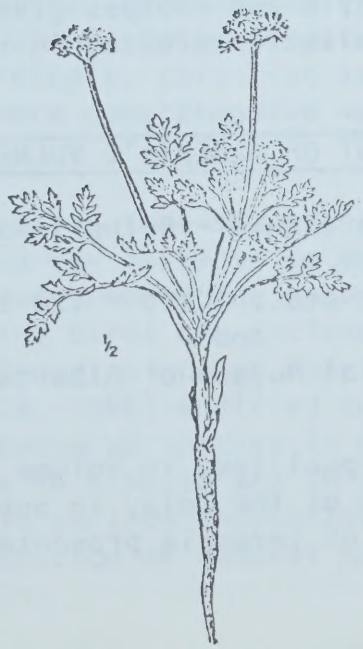
Bracts of involucel



The bracts are connate at the base (or partly connate) and are divergent.

Habit sKetch of the whole plant

Flowers are yellow.



Musineon divaricatum

NATURALISTS' BOOKSELF (15)

WILD HARVEST

by Alyson Hart Knap

Review by Margaret E. Reine, (E.N.H.C.)

Contrary to the title of Alyson Hart Knap's book, it is not just another guide to edible wild food. Wild Harvest provides the reader with enjoyable reading as well as a combination of species identification and distribution, and creative recipes for the use of these economical food stuffs. The set-up of the book separates the plants into sections according to some of their uses; salad plants potherbs, starches, fruits, nutty snacks as well as plants to be avoided. This organization makes the book useful for those who are adventuresome enough to plan a complete meal from a 'wild garden.' Knap has a way of writing that makes you wish you were sitting at their table to sample her wild gourmet. She makes the whole process of collecting, cleaning and cooking so easy and enjoyable one can hardly wait to try it for themselves. In Wild Harvest, Knap uses her wild food stuffs for any and every type of cooking from plain soup broth to cocktail specialties. The format, style and recipes given in this book make it worthwhile for any naturalist interested in trying the Wild Harvest.

A PRELIMINARY LIST OF ALBERTA'S VULNERABLE BIRDS

Part II. (Hawks - Fringillids)

by G.R.A. Ebel of LGL Ltd., 10110 - 124 Street, Edmonton
and
D.A.E. Spalding, Provincial Museum of Alberta, Edmonton, Alberta

(Part I of this article was published in Volume 4 Number 4 of the Alberta Naturalist. Because of the delay in publishing Part II, the introduction and definition of terms is presented, again, in this issue. - Editor).

No attempt seems to have been made to establish a comprehensive list of vulnerable or endangered birds of Alberta. A paper in the Canadian Field Naturalist (Godfrey, 1970) lists birds endangered on a national basis, and two recent reports (Osborne, 1973 and Alberta Lands and Forests, n.d.) deals with several bird species considered to be endangered in the province, but neither paper attempts complete coverage. For other provinces, a limited list is associated with the Ontario Endangered Species Act, 1971 and there is an unpublished list for British Columbia.

This is a matter of considerable public interest (for instance, many enquiries received at the Provincial Museum of Alberta ask for information on endangered species). In an attempt to provide some of this information, a travelling exhibit on selected vulnerable birds in the province was prepared by one of us (GRAE) at the Provincial Museum using funds from the National Museums of Canada. It was decided to support this by an accompanying list of birds considered vulnerable in the province.

Classification of any bird as endangered or vulnerable is somewhat subjective, especially in the absence of adequate information regarding species distribution, population and the impact of man's activities on most species. Useful research is being done on some species, notably by the Canadian Wildlife Service on birds of prey and water birds. Others are receiving attention from professional and amateur naturalists, but a number of species remain inadequately studied. In preparing this list we have included marginal species, in the hope that attention will also be directed towards them. Relevant data is widely scattered, and often unpublished. Accordingly, this list is presented in preliminary form and if possible, a more comprehensive version will be prepared.

Definition of Terms

Our concern is with birds that are presently known or suspected to breed in the province, and may cease to do so before the end of this century. Species that have bred in the recent past but are probably already extinct as breeding birds are included for completeness.

Each species is assigned to one of four categories based on those of the Red Data Book (IUCN, 1966) modified to suit Alberta. These are: Endangered: An endangered species is one whose prospects of survival and reproduction in Alberta are in immediate danger. The decrease of individuals in various populations is due to such factors as over exploitation, depletion of natural habitat, predation and vandalism.

These species must have help or complete loss will probably result. Rare: A rare species is not at present endangered but does not commonly occur in Alberta due to the limited area of its preferred habitat. Peripheral: A peripheral species is one whose occurrence in Alberta is at the border of its natural range. It may be rare or endangered within the province but not elsewhere. Special attention is needed to assure that the species is maintained as a breeding bird in the province. Status undetermined: A status undetermined (unknown) species is one that is suspected to belong to one of the above three categories, but for which insufficient information is available to base a decision. Systematic List: The species are listed in taxonomic order, with a summary of the justification for their inclusion and factors known to affect them. References to information on each species are given, but general reference such as Salt and Wilk's Birds of Alberta are not separately listed each time.

Sharp-shinned Hawk

Whenever mixed forests occur in Alberta this hawk may be found nesting. Their numbers vary from year to year, usually reflected by their prey population. Destruction of habitat and indiscriminate hunting contribute to vulnerability of this species. Its status is rare but more information is needed.

Broad-winged Hawk

The status of this hawk is peripheral. No specific threats are known. More information is needed on distribution and breeding locations.

Ferruginous Hawk

A prairie hawk of uncertain status and distribution. Its vulnerability to shooting and disturbance at the nest and alteration in its habitat are some factors which affect the range and breeding status of this raptor in Alberta.

Golden Eagle

Nests in the mountains and restricted prairie areas. The National Parks offer some sanctuary during the summer months. However, during the late fall, Golden Eagles move out onto the prairies seeking food. At this time it may fall prey to traps set for coyotes. Hunting and perhaps biocide residues in prey populations potentially affect current populations. More information on population size is greatly needed.

Bald Eagle

Considered to be endangered as a Canadian species by Godfrey (1970) and declining throughout much of its range as a result of habitat destruction, illegal shooting and biocides. Alberta breeding range is restricted to northern areas and the mountains, and no data on population size are available.

Osprey

Considered to be endangered as a Canadian species by Godfrey (1970) and declining throughout much of its range. Alberta breeding range and population are not well known.

Prairie Falcon

Considered by Godfrey (1970) to be endangered in Canada, this is a falcon of restricted world range that nests in southern Alberta. Studies show an average of 1.6 fledglings per nest. Total population is not known. Threats in Alberta are known to include shooting, disturbance at the nest and egg collecting. Taking of young birds for falconry is known to be a threat elsewhere, and the pesticide levels in Alberta populations are relatively low. There are suggestions that prairie falcon may have expanded to replace missing Peregrines.

Peregrine Falcon

Known to be endangered throughout the world by the effects of pesticides. Alberta populations have declined markedly in recent years; 39 known nest sites were checked in 1969-70, of which only 3 were occupied. Dekker (1967) documents the total disappearance of 5 pairs in seven years. Factors known in Alberta include shooting and falconers taking young.

Merlin

Godfrey considers the race richardsonii, which is limited to the prairies, to be endangered in Canada. Its status in Alberta is unknown.

American Kestrel

Considered common but monitored populations have indicated a general decline of this little falcon in Alberta. No specific threats are known but biocide poisoning is suspected in the case of this decline.

Greater Prairie Chicken

There has been no evidence of breeding since 1934, and only very occasional records of occurrence in the last twenty years. This species is regarded as extinct as an Alberta breeding bird.

Sage Grouse

This species is restricted to the extreme southeast of the province. Detailed information on population size and breeding distribution is unavailable. No specific threats are known but agricultural land use may be important in reducing breeding areas and distribution. Its status is rare.

Whooping Crane

The Whooping Crane has not bred in Alberta for many years and may be considered extinct as a breeding bird in the province.

Virginia Rail

The status of this rail is unknown. However, through the cooperative efforts of many observers, the breeding range has been established in central Alberta. More information would ascertain its status. No specific threats are known.

Yellow Rail

More information concerning population size and breeding locations are needed to assess its status in Alberta. Increased land demands impose a threat, especially on the edges of woodland marshes, its preferred habitat.

Piping Plover

Breeds in the central region of Alberta. It is found nesting on sandy ground or rocky shores of a lake. At the time of writing the population size and extent of breeding distribution are unknown. Fluctuation in water levels and agriculture threaten the existence of these birds.

Mountain Plover

Populations have been greatly reduced as a result of its inability to cope with the advance of settlements and the consequent distruction of their habitat. It can be considered as endangered in the province.

Upland Sandpiper

Suffered much from loss of habitat during this century.

Short-billed Dowitcher

Breeds in an isolated pocket northwest of Edmonton. This species is easily confused with its closer relative, the Long-billed Dowitcher. Current population trends have not been documented, and may be considered rare due to the limited area of its preferred habitat.

Forster's Tern

Difficult to separate in the field from the Common Tern. Its preferred breeding habitat is on floating rushes, muskrat lodges or even islands. Fluctuating water levels and vandalism are possible threats to existing breeding populations. Its status is unknown.

Caspian Tern

The only breeding area so far recorded is in the extreme northeast corner of Lake Athabasca. Its status is undetermined with no specific threats known.

Black-billed Cuckoo

May be found in southern Alberta inhabiting the dense brush in prairie coulees and willow thickets along roads, streams and lakes. Cuckoo numbers may correspond to prey (tent caterpillar) availability, but more information on population size and distribution is needed for this peripheral species.

Pygmy Owl

Considered as a peripheral species breeding in the Rocky Moutains. Few nests have been located and logging of mature coniferous forests is the only threat known.

Burrowing Owl

Is at its northernmost limit in Alberta. On the prairie of southern Alberta, this owl may be seen standing on a mound of earth outside its burrow. Human interference and agriculture threaten this species.

Barred Owl

Believed to breed in small numbers throughout the forested regions of northern and western Alberta. Status, population size and threats are unknown. More information is needed.

Great Gray Owl

A resident of deciduous and mixed wood forests in unsettled areas of western and northern Alberta. This species is threatened by indiscriminate hunters. Throughout its range, it may be considered rare.

Boreal Owl

Agriculture and other human encroachment has probably affected the natural range of this owl. Its status has been considered peripheral, but, more information on this owl is greatly needed.

Black Swift

Very little information is available concerning the status of this bird. Known breeding sites are severely limited and population size is unknown.

Calliope Hummingbird

A hummingbird of mountain valleys, its status is unknown. No specific threats are known and more information about distribution, population and breeding location are required.

Lewis Woodpecker

There is no detailed information about breeding status or population size and distribution of this species. Its preferred mountain habitat is burned-over areas and open woods with scattered large trees. It may be considered as having a peripheral status.

Black-backed three-toed Woodpecker

There is no detailed information available; its status is unknown. It is found in coniferous forests of the mountains and northern parts of the province. No specific threats are known.

Yellow-bellied Flycatcher

Inhabits the mixed-wood and coniferous forested regions between Athabasca and Less Slave Lake. Population size, threats and breeding limits are not fully known.

Western Flycatcher

Population, breeding range and specific threats are unknown. More field work is needed to determine its status in Alberta.

White-breasted Nuthatch

Little is known about this nuthatch of mature deciduous woodlands. It may be far more common than records indicate. Only careful reportings will determine its status in Alberta.

Brown Creeper

The status, population size and breeding distribution of this small woodland bird are unknown in Alberta.

Winter Wren

Detailed information, status and population numbers are unknown. It has been recorded from the northern half of the province and from various parts of the mountains.

Mockingbird

There are two successful breeding records in Alberta. Several additional sightings have been made, but information is still lacking on breeding limits and population size.

Townsend's Warbler

This species appears widespread in the mountains but has not been proven with certainty to nest in Alberta.

Blackburnian Warbler

This species is thought to breed in areas of central Alberta, but no definite evidence is available.

Chestnut-sided Warbler

Old records of nesting supplemented with recent records in the breeding season suggest that this species may be present as a breeding species. More information is needed.

Pine Warbler

Another species that may breed in remote areas. Its status is unknown in Alberta.

Yellow-breasted Chat

This species has a limited range in Alberta but may have increased in recent years. Its provincial status is unknown.

Canada Warbler

Occurs regularly in the breeding season, but breeding has not been proven. More detailed information is currently needed.

Northern (Bullock's) Oriole

The status of this bird may be considered peripheral as it breeds in the extreme southern Alberta. No specific threats are known but agriculture - the removal of suitable nesting habitat - may potentially limit its expansion.

Black-headed Grosbeak

During this century the range of this bird has been considerably reduced and at present it may be found in southeast Alberta. No specific threats are known.

Lazuli Bunting

Occurs in southern Alberta, breeding in the mountains and foothills. No specific threats are recognized and more fieldwork is needed to ascertain its status, which at this time is unknown.

Cassin's Finch

Breeds in Waterton Lakes National Park. No detailed information is available of its breeding range in Alberta. Modified land use in the National Park may imperil the population; otherwise no specific threats are known.

Grasshopper Sparrow

This species may nest in limited areas. Little information is available.

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OVERHEARD (47)

"You can drive through some big game areas. This makes it easier for animals to observe humans in their natural habitat - the automobile." - Harold Coffin, AP.
(From Defending all Outdoors Vol. 9 No. 2).

Errata, Vol. 5 No. 3, p. 108, line 1.

"brand" should read "band." (No, Virginia, there is not a cowbird branding program in Kansas).

PROVINCIAL HAWK WATCH PROPOSAL

by Steve Bradley
LGL Ltd., 10110 - 124 Street, Edmonton

Many of you are aware of the spring and fall pilgrimages of Hawkwatchers to Hawk Mountain in Eastern Pennsylvania, and are perhaps envious of the spectacular flights of Raptors which are so well known in that area. Perhaps fewer of you, however, know of similar sites in Minnesota, Ontario and New England which, although generally lacking the intensity of the Hawk Mountain flights, are still faithfully served by Hawkwatchers who provide a continuum to the data obtained from Hawk Mountain.

Up until now there have been minimal efforts in Alberta, which do not begin to approach Eastern efforts, insofar as monitoring Hawk migrations is concerned. This is not only unfortunate, but also perplexing, considering the wealth of Raptors which frequent Alberta during the breeding season, and the enthusiasm which is generally prevalent among Alberta birders. I am presently monitoring Raptor migration at Fort Chipewyan in conjunction with AOSERP, but I am of course sampling only a fraction of the Raptors which will move through Alberta this autumn.

With this letter I offer to serve as a co-ordinator for deploying troops of Hawkwatchers at various potential Raptor concentration points throughout Alberta, and I hope to accumulate enough volunteers for this task so that a favorably thorough watch can be commenced next fall. At present, however, knowledge about significant Raptor concentration points in Alberta is lacking; Pincher Creek, Beaverhill Lake, and west of Bassano are the only locations at which good Raptor flights have been observed. (Editors' Note - Hawk migration is regularly observed in the Bow River Valley downstream from Calgary, and in the Cochrane-Morley Flats area.) It should be emphasized, however, that areas of major flights are not a necessary requirement for significant data, and that low daily or seasonal totals at several lookouts will provide information every bit as important as that obtained from major flights at single lookouts.

If you think you would be interested in Hawkwatching next fall, and are willing to sacrifice a day off, a weekend or two, or an entire holiday so as to maintain a vigil at Pincher Creek, Beaverhill Lake, or wherever else you know or suspect (Foothills?) that Hawks migrate

past, please contact me at the address on the previous page. I look forward to hearing from you!

SELECTED A.D. HENDERSON ARTICLES

submitted by Norbert G. Kondla, Lombard North Group Ltd.
809 - 8th Avenue, S.W., Calgary, Alberta

In a recent article (Alberta Naturalist 5(1): 34-35) Norbert Kondla presented a list of interesting, but little-known articles by A.D. Henderson, on Alberta avifauna. Norbert has kindly provided us with copies of some of these articles, and we intend to reprint them as a continuing series. (The ideas expressed in these articles are not necessarily supported by the Federation of Alberta Naturalists).

The original articles had enough mistakes in them to prompt Mr. Henderson to write the following note in 1937. - Assoc. Editor, J.W. Case.

THE OOLOGIST, Vol. LIV, No. 1: 8-9, Jan., 1937

PROOF READING FIVE HUNDRED MILES FROM HOME

by A.D. Henderson

I noticed in the September and October numbers of the Oologist an article by one A.D. Henderson, who lives "way back in the sticks" at Belvedere, Alberta. This bird certainly has made some outstanding discoveries as published in the Oologist. Several of the species mentioned are absolutely new to the ornithology of North America. I might mention such species as Mate-colored Junco, Yellow-billed Sapsucker, Redhawk, Pud-billed Gube, Western Gube and Holbodlis Gube. The last is a wow - almost as wowsey as wovillor.

In the present advanced state of North American ornithology, it is amazing that one man in one season should have been able to add such a number of new species to the A.O.U. list. Possibly, however, the A.O.U. Committee will be hard-boiled and skeptical and refuse to recognize them.

It is a cold, cruel world, but surely the discoverer of Halbodlis Gube and Wovillor should get a couple of medals at least, even if he does have to throw the rest of his new species in free. If he don't, well, "there ain't no jutsice."

Of course the printer may have made a mistake in the names and they really refer to species already well known to science. The following are a few examples of his art - held for head; wit-wits for wita-wita; sloved for shoved; Lake Majean and Lake Magean for Lake Majeau; attached for attacked; night for ride; barn for burn, lod for old; 1935 for 1925; Fort Assiniboive for Fort Assiniboine; night for sight.

It is said that the homicide rate in your country runs fairly high. In view of the above I do not wonder at it, and by the way, could you tell me the cost of transportation to Albion and when the season on printers opens in New York State?

THE OOLOGIST, Vol. XL, No. 8: 142, Aug., 1923

THE RETURN OF THE MAGPIE

Several old-timers have informed me that the Magpie was formerly common in the Edmonton District, where they made themselves objectionable by attacking cayuses with sore backs, in the days when pack trains were no novelty in Edmonton; but from the time of my arrival in Alberta, in '98, until the fall of 1919, I never saw a single specimen in this part of the province.

On September 15th, 1919, I observed one lone straggler flying near the Pembina River, at Belvedere. In 1920 one made its appearance on September 1st, alighting on the back of one of my horses in the pasture, and on the 9th I observed four of them together. In a short time they became generally distributed over the district and remained through the winter. In the spring they all disappeared except one pair, which built a nest on my place at Lac La Nonne, and raised a brood of five young. One of these I took for a pet, but it did not live.

I found the nest on April 5th. On the 17th it appeared to be completed and the bird was sitting on the 23rd.

The nest was in a thick clump of willows and was the usual roofed structure of sticks, described in the bird books. I observed that it had two entrances. On June 11th the young had left the nest and were perched on branches near it. During the nesting period the birds were very quiet and seldom seen. The family remained in the vicinity all summer and I often observed the six of them together. They seemed to be the only Magpies in the country, as on several motor trips to Edmonton, 60 miles southeast, and as far as 30 miles east, during the summer none were seen.

On August 25th I saw eight of them together, so they must have been joined by two more birds, and on October 23rd I saw eleven at one time. Since then I have seen Magpies nearly every day and they seem to be generally distributed over the district. An interesting question is, why did the American Magpie abandon the country for over 20 years and why are they now re-occupying it?

THE OOLOGIST, Vol. XLVII, No. 6: 64-65, June, 1930

THE CONNECTICUT WARBLER IN ALBERTA

In The Auk for October 1929, the nesting of the Connecticut Warbler was treated at some length in three very interesting papers. In order to complete the Alberta record as far as known to me, I wish to add the following notes. The delivery of this Warbler's nesting in Alberta was entirely due to Mr. R.C. Harlow who was visting me at the time. I repeatedly urged upon him the desirability of placing on record the nests found at Belvedere, but for some reason he has so far not done so.

I was hunting the Connecticut with Harlow when the nest mentioned as now being in Mr. Norris' collection was taken. We had located a singing male bird and had beaten over all likely ground without success until we were tired out and disgusted, though I had flushed the female bird a few yards from where Harlow afterwards found the nest. We finally gave it up and went on but Harlow returned later for another try and found the nest. I secured a photograph of the nest, a rather poor one, but nevertheless the first one ever taken as far as I know of, and it shows the eggs and surroundings of grass and weed growth plainly enough.

Harlow has previously taken a nest of four eggs on June 15th, and another nest of four eggs and female bird was taken on June 25th after Harlow's departure. These nests were taken in 1923, and the last set mentioned is still in my collection. In 1926 Harlow took two more sets of the Connecticut at Belvedere and none have been taken here since that time. This brings the known number of sets of eggs to seven, as follows: Seton, in Manitoba one, Harlow four, and Henderson one in Alberta, and Huff one in Minnesota. The Kells record at Listowel, Ontario, is apparently not accepted.

In regard to the eastern records of the nesting of the Connecticut Warbler in Manitoba and Minnesota the most interesting feature to the Alberta observer, and one that fills him with amazement, is the fact that the birds frequent and nest in moss grown swamps and muskegs amid spruce and tamaracks. In my field work each June, I hunt the muskegs regularly and never have I seen a Connecticut Warbler actually in the muskegs in the breeding season, much less nesting time. All the nests taken at Belvedere have been on dry ground where copses of popular and willow stand in open grass land, though muskegs similar to the ones described as their nesting habitat in Manitoba and Minnesota are available only a few hundred yards away.

In the Fort Assiniboine District to the north of Belvedere I have also observed the Connecticut Warbler. When I say observed I mean to say that I have heard the unmistakable note of the male bird and occasionally stopped long enough to get my glass on the singer. The females keep mostly to the ground and are rarely seen. Here also where muskeg predominates they are only found in the stretches of poplar country. I found no nest on the Fort Assiniboine County nor did I look for any as it was a little too early in the season, but they undoubtedly breed there.

As far as my present knowledge goes, the last place I would think of looking for a nest of the Connecticut Warbler in Alberta would be in a muskeg which seems to be the exact opposite to the experience of eastern observers.

The Connecticut Warbler is by no means a scarce summer resident in this part of Alberta. It is an easy matter to find a singing male in mid-June and be certain that the nest is in a certain patch of territory adjacent to his singing trees, but only a great amount of persevering hard work in beating the ground will disclose the nest, and that is the principal reason that more nests have not been taken at Belvedere.

Each year I resolve that when the time comes around I will have a real try for the Connecticut, but after being in the field since early March, considerable of my pep has evaporated and the hard slogging work of hunting the Connecticut has little appeal for me, with the memory of such sporting propositions as the Canada Jay, Hawk Owl, Yellowlegs and others still fresh in my mind. As Harlow says, "It is hard work and no kick in it," and it is not likely that eggs of the Connecticut Warbler will ever become common in collections.

THE OOLOGIST, Vol. 41: 132, 1924

A NEST OF THE SOLITARY SANDPIPER

One of the nests I particularly wished to find in the season of 1923 was that of the Solitary Sandpiper. I was not satisfied with the pictures I had obtained in 1922 showing the nest and eggs of the bird and published in the April 1923 Oologist. If I could find a nest in a more favorable location I hoped to secure better ones.

On May 22nd I was joined by Mr. R.C. Harlow for a month's collecting around Belvedere, Alberta, and he was quite as keen as I was to find a nest of the Solitary Sandpiper. The birds, however, proved to be much less numerous than in former seasons and were absent from many of their old haunts. Perhaps some calamity happened them during their winter sojourn in the South.

The finding of a nest was quite accidental. The settler on whose place it was, had been building a fence, and running out of nails, returned home for some, and on his way happened to see the bird on the nest. There were three eggs in the nest when found on May 29th and he immediately notified Harlow and myself who were collecting in the vicinity.

We were very much pleased with this piece of luck, and returned to take the nest next morning. The bird was setting when we arrived and I secured a picture of her on the nest, which though not a very good one, gives an idea of the surroundings. The nest was about ten feet from the ground so it was necessary to build a tripod to stand on in order to photograph it. By the time this was done it was after noon so we made tea and ate our lunch. This proved a great mistake as the sun had been shining brightly all morning but now the sky clouded over and we had to wait four hours until the sun shone again.

While waiting, Harlow went off in the woods and took a set of two eggs of the Western Red-tailed Hawk, and I discovered a set of four eggs of Wilson's Snipe close by. The Sandpiper returned once but did not go on the nest.

The sun at last appeared from a break in the clouds and I secured a couple of pictures before it disappeared.

This nest was about two hundred yards from the one taken last season, and near the shore of the same little lake. It was an old Robin's nest about ten feet up in a scraggy green spruce, growing in a tamarack muskeg. The eggs were four in number and lay on the bare mud of the old Robin's nest. The eggs were much like the ones taken last year and are now in the Harlow collection.

THE OOLOGIST, Vol. XXXVIII, No. 4: 38, Apr. 1, 1921

NOTES ON THE SHARP-TAILED GROUSE

Though the Sharp-tailed Grouse is one of our best known Alberta birds, it was not until the present season, 1920, that I had the pleasure of examining two nests of this fine game bird. This season the birds are more numerous than they have been for many years, and I have heard of several other nests being found in the neighborhood.

The Ruffed Grouse is also very plentiful.

After a season or two of great abundance, the Sharp-tails disappear excepting a few birds, and probably migrate to other parts of their range.

This bird is the Prairie Chicken of Alberta, commonly known as "Chicken" and the Ruffed Grouse as "Partridge" to sportsmen.

The Cree name of this Grouse is Pee-hue and this seems to have been extended to include the Ruffed Grouse. This name is simply the call note of the birds, a clear musical whistle, used principally when the flock gets separated in the long grass and brush. They also have a number of other notes, rattling and guttural croaks, used chiefly on clear frosty mornings, and on their dancing grounds. These dancing grounds are usually situated on top of a hill or knoll with short grass growth. Here they wear a network of little paths resembling rabbit runways where they perform the antics known as dancing in the spring mornings and evenings.

And here also their enemies take toll. Hawks killing many and Indians and half-breeds more.

Their method is to bend a willow into the shape of a croquet hoop and stick the two ends into the ground, forming an arch over the path and attacking a hanging snare to the center of the arch. Most dancing grounds close to a trail were decorated with these yellow croquet hoops when I first came to the country twenty-two years ago, but now are seldom seen.

The birds appear rather stupid on the dancing ground and will remain there after a hawk has captured one of their number and devours it a short distance away.

The Sharp-tailed Grouse is a plump, compact bird and my wife described them rather aptly on a recent motor trip when we were continually flushing them along the road by remarking "There goes another fatty." They fly straight away when flushed and make an easy wing shot. When well started, their flight is slightly undulating and consists of a succession of rapid wing strokes and sails. They like to perch in the tops of the populars when the leaves have fallen on frosty fall mornings, and many are picked off with .22 rifles.

They are fond of grain, wheat preferred, also different kinds of wild berries, and I have found their crops full of grasshoppers well on into winter when the ground has been free from snow and it would be almost impossible for a human to find a single grasshopper. They also feed in the birches in winter and I have often seen small birches literally full of them.

The first nest examined by me on June 2nd contained fifteen eggs, and was located in a patch of wild roses on a hillside. The nest was a hollow in the ground, lined with dry grass and a few feathers, at foot of rose bushes. This is the nest in the photograph. The second nest visited on June 9th was similar, a hollow in the gound at foot of a rose bush, lined with dry grass and a few feathers, situated in burnt off timber. This nest contained thirteen eggs.

NOTES ON THE DOUBLE-CRESTED CORMORANTS, WHITE PELICANS AND GREAT BLUE HERONS OF BEAVERHILL LAKE, SUMMER, 1975

by D.V. (Chip) Weseloh, Dick Dekker, Steve Brechtel & Rod Burns

In spite of the multitudes of ornithologists, birdwatchers and natural historians who visit the shores of Beaverhill Lake each week, the area's avifauna, and indeed its entire natural history remain, for the most part, an undocumented entity. Beaverhill Lake, perhaps more than any other water body in Alberta, suffers from an apparent reluctance of its most ardent followers to record and make available their observations for the benefit of the general public.

The following observations were gathered together 1) in an attempt to partially rectify this situation, and 2) to more easily evaluate future status changes at Beaverhill Lake of the species herein reported.

The data from which this report was compiled were collected by the authors during various periods of 1975. Extensive ground observations were made throughout the year by Dick Dekker and Steve Brechtel. Aerial surveys of the lake were conducted by Steve Brechtel on June 10th, August 14th and weekly through September and October for the Alberta Department of Recreation, Parks and Wildlife. Weekly ground observations were made by D.V. Weseloh and/or Rod Burns at Beaverhill Lake from mid-August to mid-October on behalf of the Provincial Museum.

Double-crested Cormorant

In 1975, Double-crested Cormorants (4) were first observed (by us) at Beaverhill Lake on May 16th. Numbers were observed to increase throughout the spring until, by the end of May, there were an estimated 60-100 individuals. In early June, cormorants numbering from 5-14 individuals, frequently were seen sitting on inundated hay bales in the northwest corner of the lake near the mouth of Norris Creek. On June 17th, nineteen individuals were seen at the dam in the southeast corner of the lake. They were observed commonly feeding at this location throughout the summer. Ten cormorants were observed near the recreational area on the east side of the Lake on July 20th.

During an aerial survey of Beaverhill Lake on August 14th, 5-8 cormorants were seen "... on nest structures" on an island (henceforth referred to as Cormorant Island) in the lake. On August 27th, unaware of the findings made during the aerial surveys, two of us examined the same island by boat and on foot. As we approached the island, 8-9 well-feathered young and adult cormorants and many pelicans, gulls and ducks (see below) flushed from the island. Only after these birds had left the island and we had set foot upon it did we notice two downy, flightless young cormorants still at the nest structures.

On examination of the two young cormorants we noted they appeared to be of vastly different age. The larger one, though lacking any obvious flight feathers, was "out-of-the-nest", moderately mobile and very vocal and aggressive. As we examined it, the larger cormorant vigorously pecked us and regurgitated several mouthfuls of minnows on us. The smaller cormorant was not yet "out-of-the-nest" and displayed little aggression (or defense) towards us. The young cormorant appeared so small, in fact, that we were afraid it might not fledge in time for autumn migration.

There were seven cormorant nests on the island. They were constructed of sticks and the nest cups were lined with vegetation, presumably from nearby beds of bulrushes (Scirpus spp.) and cattails (Typha spp.). Six of the nests were located on bare dirt and abutted one another in a group which measured eight feet in diameter. The two largest nests measured 20 and 12 inches high, respectively. The seventh nest was located amongst many rocks approximately 30 feet from the other nests. It appeared that all the nests had been used during 1975 and we presumed the feathered young which fled the island at our approach had been raised on the island. No cormorant egg shell fragments or dead young were found near any of the nests or anywhere else. The two young cormorants remained at the nest structures as we departed.

On September 3rd we again visited Cormorant Island, this time for the purpose of photographing, measuring and weighing the young. As we surveyed the island from a distance, we again counted nine cormorants near the nest structures. On approaching the island, however, we observed that all the cormorants fled. A young cormorant was very conspicuous, as it was much smaller and remained closer to the island than the rest of the cormorants.

During the early evening hours (1830-1930) of September 5th, an aerial survey was made of the lake and four cormorants of undetermined age were observed on Cormorant Island. On September 24th no cormorants were observed on the island. With the mild and extended autumn weather this year, we have no reason to believe that the young cormorants originally seen on August 27th did not fledge.

To the best of our knowledge, Double-crested Cormorants have not nested on Beaverhill Lake in recent years (R. Lister, pers. comm.; Vermeer, 1969). We do not know, however, when the colony on Cormorant Island originated. The relatively large size of two of the nests gives cause to believe that nesting, or at least attempted nesting, may have occurred in 1974.

White Pelican

In 1975, White Pelicans (4) were first seen (by us) on Beaverhill Lake on May 3rd. A dozen were seen on May 15th and 50 were counted near an offshore island on May 31st. During each of these sightings the pelicans were observed swimming about in close formation, submerging their heads and bills for short periods of time. On bringing their heads up, with their bills raised at a slight angle (to the horizontal), the pelicans displayed a swallowing motion and were presumably feeding on fish they were catching in the lake.

Aerial and ground surveys showed that pelicans remained at Beaverhill Lake throughout the summer: on June 10th, at least 18 were observed on various islands in the north and south ends of the lake; 200-300 pelicans were observed on the NW corner of the lake on July 5th; during a ground survey on July 17th, 130-160 pelicans were seen feeding in a marsh adjacent to the SE shore of Beaverhill Lake and another 150-200 were present on a small gravel island (making a total for the survey of 280-360). On each of five ground surveys from July 29th to August 21st, 100 to 200 pelicans were observed on the lake. Pelicans were most frequently seen at the dam at the SE corner, on various offshore islands and along the north shoreline of Beaverhill Lake. Sixty-eight pelicans were present on the Cormorant Island on August 27th and 100 were there on September 3rd.

White Pelican numbers declined rapidly in September; aerial surveys on September 11th, 18th and 25th yielded only 5, 1 and 1 pelicans, respectively.

A single individual, which we suspect may have been injured, was seen on the same small island on September 18th and 25th. Ground surveys confirmed that the pelicans probably departed from the area during early September; none were seen along the south or east shores on September 11th or 22nd but 5 pelicans were seen at the dam on September 13th.

In spite of the well documented occurrence of White Pelicans at Beaverhill Lake during the summer of 1975, it does not appear that they nested anywhere on the lake. No evidence of nesting was found during the many aerial surveys that were flown of the area. No juvenile plumaged pelicans were seen in any of the flocks. Also, during August-October we visited and examined all islands (4) which we felt could harbour nesting pelicans but there was no indication that White Pelicans had nested on any of them.

White Pelicans are known to have bred at Beaverhill Lake in past years. Lies & Behle (1966) indicated that there were 180-200 adults with 81 nests present in 1959 but only 14 pairs in 1960. They say the colony was deserted in 1961 and 1962 but may have been re-established in 1963. The colony was not active in 1967 (Vermeer, 1969). A more complete history of the birds of Beaverhill Lake is in preparation (R. Lister, pers. comm.).

In areas where White Pelicans have formerly bred it is not unusual to have a substantial non-breeding summering population. For example, prior to 1966, a large White Pelican colony existed at Lake Newell Reservoir near Brooks, Alberta, but they have not nested there since 1967 (Vermeer, 1969). Several hundred White Pelicans have been seen in the Lake Newell - Lake McGregor vicinity during each of the last two summers (R. Butot, pers. comm.; Calgary Field Naturalist, 1973 & 1974).

White Pelicans and cormorants are very susceptible to any sort of disturbance; entire colonies have been known to desert through human disturbance (Farley, 1919: Houston, 1962: Kury & Gochfield, 1975:). It was because of this potential desertion factor that none of the possible nesting islands were visited until late August - well after the average nesting season.

Great Blue Heron

During the summer of 1975, Great Blue Herons nested at Beaverhill Lake, for what is believed to be the first time in recent years.

A local farmer maintains, however, that a single pair nested in a tree along Norris Creek in 1974.

Great Blue Herons dramatically increased in the Beaverhill Lake area in 1975 as compared to previous years. In 1975, three nests were built in a single tree on a heavily wooded, almost completely inundated island in Beaverhill Lake. Young herons were observed standing on each of the three nests as late as August 3rd. On August 27th we visited the island and nesting tree but found no sign of adult or young Great Blue Herons. The nests were located about 20 feet up in a 25-30 foot aspen tree, the largest tree in the immediate area.

Location of Islands

The exact location of the islands upon which the cormorants and herons nested, as well as those examined as potential pelican nesting areas have not been given. This has been done to minimize the possible disturbance at the islands. For those who have a valid need, a copy of this report, complete with a map of the islands of Beaverhill Lake, is on file at the Provincial Museum.

Summary

In 1975, there was a colony of at least two and probably seven, active Double-crested Cormorant nests on Beaverhill Lake; a smaller colony may have been active at the same location in 1974. White Pelicans did not nest on Beaverhill Lake although there was a summering population of at least 250-360 individuals. There was also an island colony of three active Great Blue Heron nests. Both the cormorant and heron colonies were successful and are believed to represent the first nesting of these species on Beaverhill Lake in recent years.

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HIGHLIGHTS 1975 BREEDING SEASON, BIRDS

PART I: Southern Alberta

by Rudi Butot

Spring started with a relative abundance of water, but by late summer all shallow bodies of water were dry in the area east of Calgary. Deeper depressions and those areas hooked into the irrigation systems still contained water. This, of course, resulted in low numbers of waterfowl in the Calgary area during late summer and fall.

Scattered sightings of Common Loons were recorded during the summer months, with one report from Banff of two adults with two young on July 12th. Red-necked Grebes were reported from Calgary, Exshaw and Irricana on July 6th. Horned Grebes were reported nesting at the latter location on that same day. Eared Grebes, which are usually reported from three or four places in fair numbers, were this year seen nesting as a large colony in only one place - Frank Lake. Here in the wetlands on the southside, a colony of at least 200 and possibly up to 600 birds were seen on nests during July, presumably for the last time at this locality. The southern third of this lake, is considered undesirable slough area by the local farmers and will be drained by the Alberta Government. To this end, a dam has already been built to stablize the northern portion, which will not be drained. (Editor's Note: The southern portion of Frank Lake supports (supported?) one of the few Western Grebe nesting colonies in our area, as well as being one of the most exceptional waterfowl and shorebird areas near Calgary. Many will mourn its passing).

A pair of Trumpeter Swans were seen near Cochrane Lake on June 1st, probably attracted by the captive pair located in the general area.

A later visit found the slough dry. The largest reported concentration of Gadwall (50) came from the south end of Frank Lake, as was the largest concentration of Cinnamon Teal (11). A single Wood Duck was reported from Banff August 18th. A report of a single female Bufflehead was received for August 7th from the Cypress Hills. Harlequin Duck sightings came from Bragg Creek (a pair, June 14th), Seebe (a pair, June 21st), Lake Louise (a pair, May 17th), and a report of a single female with one young came from Sheep River area west of Millarville August 10th.

Red-tailed and Swainson's Hawks were relatively abundant, and three Turkey Vultures were seen near Huxley on July 20th. A Bald Eagle was reported on a nest near Banff on June 14th. It incubated eggs for three months before abandoning the nest. A Peregrine Falcon was reported from Banff on August 18th.

Spruce Grouse with young were reported in July from Nanton and Lake Louise. A Ruffed Grouse with 4 young was seen near Longview on July 19th, and a single White-tailed Ptarmigan was sighted near Lake Louise on July 8th. Ring-necked Pheasant and Grey Partridge were rather scarce again this year.

Pectoral, Baird's, Least and Semipalmated Sandpipers were reported from the Delacour/Irricana area in good numbers during the second week of July, as were Wilson's and Northern Phalaropes.

A rare sighting of a Long-tailed Jaeger was received from the Kananaskis Lakes on August 17th. Owl reports were rather spotty, the most interesting being a Saw-Whet with two young on August 27th from Bearberry.

Some American Robins in Calgary raised two broods this year, the first fledging by June 10th, the second by July 11th. Bobolinks were reported as follows: 1 on June 8th from Millarville; 2 on June 17th at Pekisko, and 7 on July 13th at Shepard. Three Indigo Buntings were reported from Cremona on May 25th.

More detailed tabulations for the summer months can be found in the summer and early fall issues of The Calgary Field Naturalist.

PART II: Central Alberta

Jim Wolford has left Alberta. I want to take this opportunity to thank him for contributing this feature during the past two years. G.R.A. Ebel, of Edmonton, will be reporting bird highlights for Central and Northern Alberta in issues to come.

NATURALISTS' BOOKSHELF (16)

by D.H.S. Richardson

The Vanishing Lichens. Their History, Biology and Importance. 231 pages. Illustrated. David & Charles (Holdings) Ltd., Vancouver (Canada) 1975. Price: about $14.50 (cloth). Reviewed by James W. Case, Dept. of Biology, Univ. of Calgary, Calgary, Alberta T2N 1N4.

In the past two years a number of general books dealing with lichens have been produced, partially in response to the increased interest in lichens and their role as bio-indicators of air pollution. David Richardson's The Vanishing Lichens is the first however, to be directed to the amateur naturalists, school teachers and other interested laymen. The author, a well-known and highly qualified lichenologist, has included in his book a wealth of fascinating facts on the importance of lichens and their uses, both past and present.

The easy-going style makes use of stories, anecdotes and clear-cut explanations. Occasional digressions I found to be interesting, although some might not appreciate his ramblings.

The book is divided into ten chapters. The morphological features of lichens are dealt with at the beginning of the book in a chapter entitled "History and Illustration." Also included are tidbits on Norwegian lichen trolls, pictographs, and methods of collecting lichens. Unfortunately nothing will be found in the index under "collecting", "methods", or "tools." Almost every chapter is devoted, at least in part, to the usefulness of lichens. Although the topic groupings may at times seem odd, (e.g., "Dyeing, Food and Dermatitis") the treatment hangs together well. There are chapters on dating of surfaces using lichens, soil formation and rock degradation, caribou and radioactivity, and relationships with smaller animals. Not to be forgotten, though, are discussions of the use of lichens in medicines, foods, perfumery and embalming.

There are some errors in the book, but few which would be caught by the non-specialist (e.g., picrolichenic acid, not oxalic acid is responsible for the bitter taste of Pertusaria amara) but several could lead an interested amateur into difficulty.

For instance Cladonia cristatella is non-sorediate although the illustration on page 18 shows soredia. Parula warblers would have trouble finding Ramalina reticulata (=R. menziesii) in southeastern North America. And Letharia vulpina has been used in Scandinavia to poison wolves, but as far as I can determine, has never been used in North America. Useful books and articles are listed at the end of the book under chapter headings, but this can result in frustration when attempting to find the source of information present in the text. The photos and drawings are well done, but more of these would have been nice.

The production of the book is generally very good (although a line is repeated on page 100), but I feel that the price is quite high for a 231 page book directed to the general public. I would not consider any of the shortcomings of the book to be major ones and I know it will be enjoyed by many others. In fact, I have trouble keeping hold of mine, as it is borrowed so often.

FAN NEWS, REPORTS, PROJECTS - J.M. Powell

Highlights of FAN Fall Directors' Meeting

The 17th Regular Meeting and the 5th Annual General Meeting of the Board of Directors of FAN was held in the Banff Centre, Banff, on September 20th, in conjunction with the Fall Field Meeting, ably hosted by the Bow Valley Naturalists.

Brief mention of this meeting, with some of the election results, was included in the last issue of the Alberta Naturalist.

The club membership in the Federation still stands at seven, although the President, Dr. Frank Harper, mentioned he had held discussions with representatives of the Alberta Speleological Society about joining the Federation. We still hope that a club will be formed in the Medicine Hat area before many more winters go by. Individual membership in FAN has now passed the 400 mark, a 33% increase from a year ago. As in previous years there has been a large turn-over in memberships, as approximately 100 of the 1974 members have not renewed. A very encouraging sign was the increase in school memberships, some of which resulted from our Provincial Bird campaign. The Treasurer, Dorothy Broadbent, reported a bank balance of $2,200.00 at the beginning of September.

The Plant Phenology Study under Dr. Charlie Bird's guidance is progressing well and we look forward to a 1975 summary report in the next Alberta Naturalist. The promotion of the Great Gray Owl print by Peter Karsten and the Snowy Owl print by Ludo Bogaert was a great success. A few prints of the Snowy Owl are still available around the province. Clubs of the Federation again decided to support the sale of 1975 Christmas cards, showing the Evening Grosbeak produced by the Calgary club - we hope the mail strike co-operates! A short report was received from the Alberta Ornithological Records Committee which included a plea for submission of records. This has been another good year for new or rare species in Alberta, but please give the Records Committee some work to do by submitting your observations. Lloyd Lohr, our Vice-President is endeavouring to see our Naturalists Guide project get further off the ground. If you are interested please contact him (see adress on back cover). Hope the Calgary club, now that they have successfully produced their centennial project, "Calgary's Natural Areas: a Popular Guide" (see elsewhere in this issue), will be able to give input for this FAN province-wide project.

Reports were received from the Standing Committee Chairpersons in the areas of publicity; publications; wilderness, parks and natural areas; environmental education; research; finance; and by-laws and resolutions. The new chairpersons would be only too happy to have individual FAN members volunteer to help with the work of these Committees. Their names can be found in the last issue of the Alberta Naturalist on page 100.

Because of the length of the meeting, reports from the FAN representatives to other groups had to be tabled until the next Directors meeting to be held in Calgary on February 14th. These groups, upon which FAN has representation, include the Canadian Nature Federation (J. Minty, formerly D. Spalding); Public Advisory Committee on the Environment, Environment Conservation Authority (J. Powell); Cooking Lake Moraine Task Force (J. Wolford, formerly P. Demulder); Alberta Ecological Survey (J. Powell); Federal-Provincial Wildlife Conference (D. Broadbent) and the Canadian Section of the International Council for Bird Preservation (J. Minty, formerly D. Spalding).

Two important resolutions passed for forwarding to the Alberta Government involved a recommendation that the Great Horned Owl be nominated as the Provincial Bird, and support for legislation to establish conservation status for ecological reserves, including natural areas.

The new or continuing elected officers of FAN are Dorothy Broadbent of Red Deer, President; Lloyd Lohr of Stettler, Vice-President; Dr. Frank Harper of Lethbridge, Past-President; Graeme Greenlee of Edmonton, Secretary; and Jack Park of Edmonton, Treasurer. Joy Finlay, Dr. Charlie Bird, Lloyd Lohr and Dr. John Powell were re-elected as Appointed Directors. Lyman Matthews continues as Corresponding Secretary and Virginia Lang as Editor, with Associate Editors, Jim Case and Martin McNicholl.

FUTURE FAN FIELD MEETINGS

Spring Meeting, May 22-24 in Edmonton, with the headquarters for the meeting to be the new Edmonton Nature Centre, near Fort Edmonton Park, just west of Whitemud Creek on the south bank of the North Saskatchewan River. This meeting will be hosted by the two Edmonton clubs who are already at work planning field trips on all three days, two evenings with guest speakers, a pancake breakfast, etc. In cooperation with the City of Edmonton we hope to hold an Alberta Nature Artists Display. Watch for more details in the next issue, and plan to spend all or part of your May long-weekend with Edmonton naturalists.

Summer Meeting, July 17-18 in and around Bigknife Provincial Park, northeast of Stettler, hosted by the Buffalo Lake Naturalists. This will be the first formal FAN summer field meeting, although an informal joint meeting was arranged by some clubs on the Red Deer River this year.

FAN BROCHURES

Did you use the two brochures enclosed with the last issue? If not, find a naturalist or potential naturalist and give them a copy. If anyone can use more copies of the brochure, these are available by writing to the box number in Edmonton.

NEW DIRECTORS ON FAN BOARD

We welcome Eldon Neufeld from the Alberta Natural History Society of Red Deer, replacing Mike O'Brien; and Eric Wallace from the Edmonton Bird Club, replacing Jim Wolford who moved to Nova Scotia, as new FAN Directors.

CLUB NEWS

(Editor's Note: Due largely to the postal strike, news from our member clubs was not received).

Calgary Field Naturalists' Society

CALGARY'S NATURAL AREAS: A Popular Guide. Edited by Peter Sherrington. A Centennial Project by the Calgary Field Naturalist's Society.

This year is Calgary's 100th anniversary, and for a centennial project the Calgary Field Naturalist's Society has put together a book on the natural areas of Calgary. Illustrated with line drawings and colour photographs, this pocketsize paperback discusses the origin of Calgary's natural communities as represented by its natural areas. The birds, mammals, insects, amphibians, reptiles and plants are all treated in detail, though not in such a complex manner so as to be incomprehensible to the nonspecialist. Profits from the sale of this book will be used to further the cause of nature conservation in Alberta.

So if you live in, or plan to visit Calgary, get your copy of "CALGARY'S NATURAL AREAS: A Popular Guide." At $3.75 you can't go wrong. Send for your copy to: The Herbarium, c/o B.M. Hallworth, Department of Biology, University of Calgary, Calgary, OR, send to: "Popular Guide", Box 981, Calgary, Alberta. ($3.75 plus 25¢ for postage and handling).

(A review of this will be included in Vol. 6 by John Powell).

NOTES AND NEWS

Nature House for Kokanee Creek Provincial Park

A Nature House, to be operational in 1976, is being built at Kokanee Creek Park near Nelson, British Columbia.

The Nature House is intended to introduce park visitors to the natural history values and recreational opportunities of parks in the West Kootenay region. Features of the modular building include a display floor, audio-visual room, and office/maintenance section. Displays will relate to the geology, plants, animals and human history features of Kokanee Creek Park and the surrounding West Kootenay area, and fishes of Kootenay Lake will be displayed in a large aquarium.

The Nature House will be staffed by park naturalists who will conduct daily interpretive walks through the park and provide an evening program of talks.

OVERHEARD (48)

"If the nineteenth century made tremendous progress in mechanical inventions, it too often assumed that these inventions, by the sheer accumulation of their material effects, would raise the moral level of mankind. Increasing experience has proved, on the contrary, that the technological development of a society does not automatically result in the moral perfection of the men living in it, and that an increase in the material means at the disposal of humanity may even present dangers unless it is accompanied by a corresponding spiritual effort ..."

- Henri Bergson, 1928, in his acceptance speech for the 1927 Nobel Prize for Literature.

The Alberta Naturalist is published quarterly by the Federation of Alberta Naturalists. Any material printed for the first time in the AN may be reproduced without permission. Credit lines will be appreciated.

Deadlines for submission of material to the Editor are: February 15, May 15, August 10 and November 15. Please include your address. All maps, charts, etc., should be submitted on white paper, of the appropriate size for publication, preferably done in type and/or india ink.

FAM membership fees are $2.00 per year regular, $10.00 supporting, tax deductible ($8.00 worth). Mail remittance to: Alberta Naturalists, Box 1472, Edmonton, Alberta T5J 2N5.

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